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Solar Energy and Energy Conservation Bank

FY 1985 Annual Report to the Congress

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Table of Contents

ii **Board of Directors**

1 **Highlights FY 1985**

2 **Report by President-Designate**

3 **Executive Summary**

4 **Summary Characteristics of the Participating Programs**

5 **Program Background**

Cooperative Agreements
Financial Management System

5 **Budget and Outlay History**

Solar Er rgy and Energy Conservation Bank Program Funding

6 **Program Activity FY 1985**

Introduction
Regulations
New Participants
Advisory Committees
National Workshop
Program Compliance Reviews
Recapture and Reallocation of Funds

11 **Summary of State Semi-Annual Reports**

Data from Semi-Annual Reports
Problems Encountered by States
Recommendations
Acceptance/Objections by Local Governments Financial Institutions and the Public

14 **Plans for Fiscal Year 1986**

15 **Synopsis of the Participating Programs**

16 **Monthly Financial Activity of Total Dollars Expended**

16 **Cumulative Financial Activity of Total Dollars Expended**

17 **Program Status Summary**

18 **Energy Conservation Advisory Committee Members**

19 **Solar Energy Advisory Committee Members**

20 **Bank Staff**

21 **Solar Energy and Energy Conservation Bank Organization Chart**

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Board of Directors

U.S. Department of Housing and Urban Development
Solar Energy and Energy Conservation Bank

Samuel R. Pierce, Jr., Secretary
Department of Housing and Urban Development
Chairperson

Substitute Director
John J. Knapp
General Counsel

Malcolm Baldrige, Secretary
Department of Commerce

Substitute Director
Dr. D. Bruce Merrifield
Assistant Secretary for
Productivity, Technology and Innovation

John Block, Secretary
Department of Agriculture

Substitute Director
Frank W. Naylor, Under Secretary for
Small Community and Rural Development

James A. Baker, III, Secretary
Department of Treasury

Substitute Director
Dr. Manuel H. Johnson
Assistant Secretary for Economic Policy

John S. Herrington, Secretary
Department of Energy

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Highlights Fiscal Year 1985

October 17, 1984	Passage of the Technical Amendments Act, Section 104(d) of P.L. 98-497, containing revisions in the Solar Bank Act
December 12, 1984	The Solar Energy and Energy Conservation Bank Board of Directors Meeting
December 31, 1984	FY 1984 Annual Report sent to the President and the Congress
January 3, 1985	Plaintiffs file a motion for an order preventing the Bank from returning recaptured funds to the U.S. Treasury
January 30, 1985	Deadline for receipt of semi-annual report from state participants
March 5, 1985	Publication of Notice of Funds Availability and Notice of Solicitation of Program Proposals in the *Federal Register*
March 6, 1985	Publication of the Proposed rule amendments in the *Federal Register*
March 20-21, 1985	Meetings of the Solar Energy and Energy Conservation Advisory Committees in Santa Fe, New Mexico
March 21, 1985	Judge rules that Bank can recapture money. However, funds cannot be returned to the Treasury
March 27, 1985	Richard H. Francis testifies before the House Subcommittee on HUD-Independent Agencies of the House Committee on Appropriations
May 6, 1985	Deadline for submission of new proposal for nonparticipants
May 16-17, 1985	National workshop for Solar Bank Program participants
June 14, 1985	Publication of the amended Final Rule in the *Federal Register*
July 23, 1985	Effective date of final regulations
July 30, 1985	Deadline for receipt of semi-annual report from state participants
August 21, 1985	Announcement of funding allocations to program participants and new program participants

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Report by President-Designate

I have been acting as Chief Operating Officer of the Bank since June 1982. Since I have served in this capacity, the Department has implemented the program through state-designated agencies, published regulations providing flexibility and a broad program scope, and instituted a performance-based plan for the allocation of funds to state-level participants. The Bank also recently expanded the program to South Dakota, the Virgin Islands and Wyoming. This brings the total number of participants to 55; 48 states, five territories, the District of Columbia and an Indian Assistance Coordinator. Nevada and Alaska are not currently participating in the program. Each participant administers a unique program within an overall framework established by the Bank. Cooperative Agreements outlining participants responsibilities have been executed which obligate all funds appropriated through Fiscal Year 1985.

Advisory committee meetings, a national workshop and program compliance reviews have been conducted to enhance program implementation. The program is now fully operational in most states. I have striven to attain economy of operation and preclude fraud, waste and mismanagement in the functioning of this program, thereby directing maximum funding toward program objectives.

As of September 30, 1985, $31.9 million has been expended to provide financing for 46,666 projects.

Richard H. Francis
President-Designate

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Executive Summary

The Solar Energy and Energy Conservation Bank (Bank) was created on June 30, 1980, by Title V of the Energy Security Act of 1980, P.L. 96-294 which was subsequently amended by the Housing and Urban-Rural Recovery Act (HURRA) of November 30, 1983 and the Housing and Community Development Technical Amendments Act of 1984. The purpose of establishing the Solar Energy and Energy Conservation Bank is to encourage energy conservation and the use of solar energy, and thereby reduce the nation's dependence on foreign sources of energy supplies.

This Annual Report to Congress covering the period October 1, 1984-September 30, 1985 is required by section 519(a) of the Act, (12 U.S.C. 3617(a)), and summarizes the activities undertaken by the Department of Housing and Urban Development in implementing the program.

The Bank is organized as a component of the Department of Housing and Urban Development (HUD). A Board of Directors, consisting of the Secretary of Housing and Urban Development, as chairperson, and the Secretaries of Agriculture, Commerce, Energy, and the Treasury, as members provide overall policy direction, while management responsibilities rest with the President of the Bank, appointed by the President of the United States with the advice and consent of the Senate. During the period covered by this report, Richard H. Francis, President-Designate, served as Chief Operating Officer of the Bank. The Board held one formal meeting in FY85 on funds recapture and also was consulted by the Bank President in writing. Formal Actions adopting a revised Final Rule and appointing a new Solar Advisory Committee member were executed by Written Action.

Two five-member advisory committees, one for energy conservation and one for solar energy, representing various parts of the private sector, provided advice on the Bank's programs and operations to the Board of Directors.

The Final Rule (24 C.F.R., Part 1800) provides for the Bank to make payments to financial institutions for the purpose of providing financial assistance outlined below to owners of and tenants in pre-1980 residential (1-4 units) and multifamily residential buildings for the purchase and installation of energy conserving improvements; to occupant owners and tenants in pre-1980 nonprofit commercial and agricultural buildings for the purchase and installation of energy conserving improvements; to owners of existing buildings for the purchase and installation of solar energy systems; and to purchasers of new or substantially rehabilitated buildings containing solar energy systems.

The financial assistance for energy conserving improvements or solar energy systems may be in the form of a reduction in the principal obligation of a loan or the qualifying portion of a loan, or a prepayment of the interest otherwise due on such loan or portion of such loan provided by one or more types of financial institutions. In the case of an owner of an existing residential building or a tenant in an existing residential or multifamily residential building, the assistance for energy conservation measures may also be in the form of matching grants provided certain income requirements are met.

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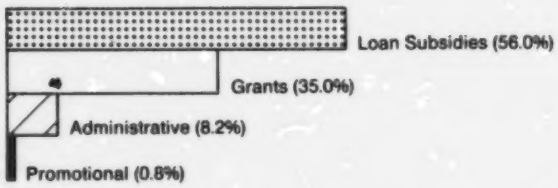
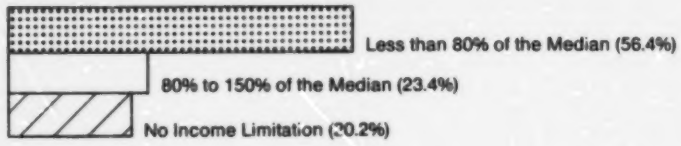
Summary Characteristics of the Participating Programs

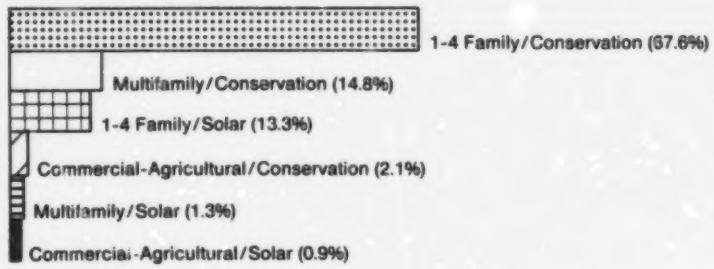
I. Funding Distribution by Type of Subsidy



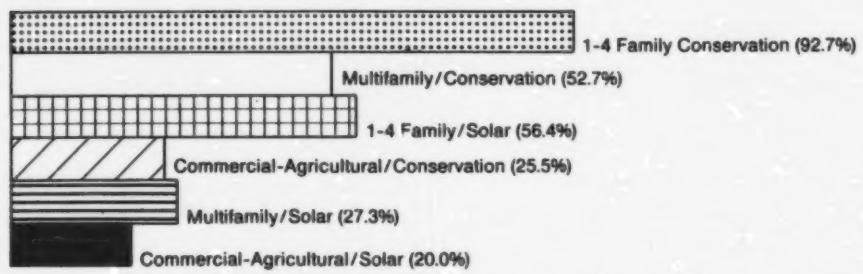
II. Funding Distribution by Family Income



III. Basic Funding Components by Building Type and Measure



***IV. Basic Program Components by Building Type and Measure**



*The percentages in Graph IV do not total 100.0% because many of the states have included more than one of the housing measure components in their program. However, Graph IV can be directly compared to Graph III. For example, IV indicates that 56.4% of all state programs have a 1-4 family/solar component while III indicates that only 13.3% of all program funds will be used to subsidize this component.

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Program Background

Preliminary steps were taken to establish the Bank in late 1980. However, in early 1981, Congress rescinded nearly all FY 1981 funding, and activities to establish the Bank were suspended. Subsequently, the Omnibus Budget Reconciliation Act of 1981 reduced the program authorization from just over $3 billion over a four-year period beginning with FY 1981 to $50 million per year for FYs 1982 through 1984. In response to appropriations for FY 1982, the Bank was reactivated.

Cooperative Agreements

The program operates in each state by means of a cooperative agreement with the Bank which establishes a legal framework for the relationship between the Bank and each state participating in the program. Each cooperative agreement consists of five articles and five supporting exhibits which clearly define the parameters and responsibilities of the state in relationship to the Bank.

The Bank entered into 55 cooperative agreements as of September 30, 1985, with 48 states, the District of Columbia, five territories and an Indian Assistance Coordinator. Only Nevada, Alaska, and the Trust Territories of the Pacific Islands do not participate. As used in the text of this report the term "state" applies to all of the above jurisdictions.

Financial Management System

In providing program funds to each state the Bank utilizes the funds delivery mechanism established by the Treasury Department as set forth in HUD Handbook 1900.27, Letter of Credit Procedures Treasury Financial Communications System (LOC-TFCS). The LOC—TFCS provides the means by which the appropriate state agency can request funds as required to respond to program activity and for the corresponding Bank response either providing for payment or rejection of the request with appropriate justification. Acting through a selected financial institution, the state agency submits forms requesting funds, ensuring that the amount requested is correct and the information on the form is complete and accurate. When this has been accomplished, the financial institution sends a funding request electronically through the TFCS to both the U.S. Treasury and the Bank. This technique provides funds to a recipient organization promptly for cash disbursement, but precludes withdrawal of funds from the Treasury any sooner than necessary.

In addition, the Bank monitors all financial transactions by inputting information derived from state requests for funds into the Bank's data management system. Program activities data contained in this Annual Report were produced from the Bank's system. The Bank also monitors the use of funds and generates program statistics for systems analysis and periodic reports.

Budget and Outlay History
(in 1000's)

	FY 1981	FY 1982	FY 1983	FY 1984	FY 1985	FY 1986
Budget Authority						
Enacted	$250	$21,850	$20,000	$25,000	$15,000	$ 0
Program Level						
Obligations	250	33	30,312	18,170	32,983	9,369*
Budget Outlays	250	33	262	7,927	26,956	36,000*
Recaptures	0	0	0	0	5,402**	3.5*

*Estimates

**Of the $5.4 million funds recaptured in FY85; $5.3 million was reobligated in FY85. $75,000 were set aside for attorneys' fees associated with the lawsuit as requested by Court Order.

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Program Activity for Fiscal Year 1985

Introduction

In its present scope, the Bank's program is designed to reduce the cost of energy in residential and nonprofit commercial and agricultural dwellings by subsidizing the cost of borrowing or providing matching grants to undertake solar energy and energy conservation measures within the parameters of the state energy programs.

Regulations

March 31, 1983
Interim Rule 24 CFR Part 1800

March 16, 1984
Final Rule 24 CFR Part 1800 (based on public comment and provisions of the Housing and Urban-Rural Recovery Act of 1983)

April 26, 1984
Effective date of Final Rule

On March 6, 1985, the Bank published a proposed rule (50 FR 9040) to implement section 104(d)(2) of the Technical Amendments Act of 1984 which mandated changes to the allocation procedures and to propose certain other necessary revisions to 24 CFR Part 1800.

This legislation required two basic changes to 24 CFR 1800.95 governing procedures for allocating funds among program participants. The relative weights among all of the allocation criteria must be stated in the regulation, whereas previously there was no fixed relationship in the regulation between the weights given to the two sets of criteria and no weights were stated in the regulation for the "reserve fund" criteria. Also, a single allocation round applying all of the criteria is now required each year instead of the distinct "formula" and "reserve fund" allocation rounds which occurred at separate times of the year under the former regulation.

Eighteen commenters (primarily state participants) commented on the Bank's proposed rule.

Two factors have been developed to determine the amount of funds a state participant will be allocated. The first factor, A, considers a state's characteristics regarding households and energy consumption. Each characteristic's value is normalized prior to weighting, so that the largest resultant value is equal to a fixed number with all other values proportionately less. The two characteristics, the maximum value and weights are as follows:

1. The number of households weighted by median income normalized to 100 with a weight of 0.5. The number of households is determined using the same procedure as defined for the present formula.
2. The average amount of energy consumed per household, normalized to 100, with a weight of 0.5.

Factor A is a combination of the numerical values of the above two characteristics.

The second factor, B, is equal to one for new participants and otherwise is determined by the sum of one plus four performance characteristics. Each characteristic's value is also normalized and weighted. The four characteristics are as follows:

1. The annual BTU's saved from subsidized measures, divided by the amount of Bank subsidies provided, normalized to 5, with a weight of 0.1.
2. The total cost of measures subsidized divided by the total amount of Bank subsidies provided, normalized to 5, with a weight of 0.1.
3. The amount of subsidies expended divided by the total amount of Bank funds obligated to a participant, normalized to 5, with a weight of 0.5.
4. The amount of subsidies expended divided by the total amount of Bank funds expended by all participants, normalized to 5, with a weight of 0.3.

The value of Factor B is reduced if other federal funds are used to pay for the cost of any measures subsidized with Bank funds. A reduction of 5 percent is applied for each 10 percent of Bank funds that are used in connection with other federal funds.

The product of Factor A and Factor B produces a score used to determine the amount of funds to be allocated to each participant. Each score is divided by the sum of all scores and the resulting ratios are multiplied by the funds available to provide the allocations.

As the rule stands now, a state could receive a funding allocation of up to six times the amount it would receive with no program activity. In effect, the old formula and the method of calculating reserve fund awards have been combined.

The Bank's Final Rule encompassing the revised allocation system as well as other minor revisions was published on June 14, 1985 in the *Federal Register* and was effective on July 23, 1985. The Bank awarded the FY 1985 appropriation of $15 million along with recaptured funds (see Recaptures Reallocation) in August of 1985. Data from the semi-annual reports were utilized to determine the performance-based award.

New Participants

Bank staff announced the level of awards in August for the FY 1985 appropriation for new and current program participants. Under this procedure, $20,116,258 of FY 1985 and recaptured funds were obligated.

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The following new participants were awarded Bank assistance:

State/Territory	Amount
Wyoming	$120,000
Virgin Islands	$120,000
South Dakota	$131,500

The awards were announced in a HUD-issued News Release on August 21, 1985. Secretary Pierce said, "This additional funding will help these participants provide subsidies to those who are most affected by the high cost of energy- low- and moderate-income people." The new award announcement brings the participant total to 48 states, the District of Columbia, five U.S. territories and provides funding for Indian reservations through an Indian Assistance Coordinator.

Advisory Committees

The Solar Energy and Energy Conservation Advisory Committees consist of five individuals each, representing a cross-section of private-sector interests. The committees meet jointly at least two times per year alternating the chair of the combined committees between the two committee chairpersons to provide advice to the Bank's Board of Directors on the operations of the Bank. The views of the advisory committee members are represented in the Bank's Annual Report.

The Solar Energy and Energy Conservation Advisory Committees conducted a business meeting on March 20-21, 1985 in Santa Fe, New Mexico. Mr. Ray Daley, former Chairperson of the Solar Energy Advisory Committee, convened the meetings in Santa Fe, New Mexico in conjunction with on-site visits to solar homes. Mr. Daley coordinated the on-site visits with Mr. Bruce also of the Solar Energy Advisory Committee and a resident of Santa Fe. The purpose of the meeting was to provide members with knowledge of the application of solar technology.

Mr. Daley opened the business meeting with a discussion of solar energy and the responsibilities of the advisory committees. In addition, a member of the New Mexico Department of Minerals and Energy attended the meeting and reviewed the process of applying for a Solar Bank loan in New Mexico.

The committees also met with Dr. Eldon Boes of Sandia Laboratories in Albuquerque, New Mexico to discuss recent developments in solar energy and attended the New Mexico Solar Energy Industries Association meeting.

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The following day, Dr. Sara Balcomb conducted a tour of new solar construction and retrofits in Santa Fe. Members had an opportunity to see state-of-the-art solar technology, discuss solar applications with contractors and meet with owners of solar homes.

During the business part of the meeting, Dr. Richard H. Francis reviewed the following staff actions in response to recommendations made by committee members.

- A promotional package was mailed to national associations representing multi-family interests,
- A newsletter was published (Solar Bank Notes),
- A national workshop was planned and an advisory committee member was selected to attend.

The committees planned their next meeting on October 10-11, 1985 in Washington, D.C.

National Workshop

The Bank organized a day-and-a-half workshop in Washington, D.C. on May 16 and 17, 1985 for state program coordinators. Program personnel representing 40 states, the District of Columbia, American Samoa, Guam and the National Congress of American Indians were present. Representatives from the Solar Lobby, the Solar Rating and Certification Corporation, the Federal National Mortgage Association (FNMA), HUD's Division of Building Technology, the Department of Energy, the Solar Energy Industries Association, the Energy Conservation Coalition, the National Association of Home Builders and the Chairman of the Solar Energy Advisory Committee participated in the morning panel. This panel was designed to increase awareness of the spectrum of energy activities taking place around the country. A question and

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answer session followed the panelists' presentation.

The afternoon and following morning sessions were devoted to presentations by selected program participants. The following state programs were presented:

Arkansas	Jim Blakley
Illinois	Henry Kurth
New Jersey	Charles Richman
Ohio	Steven Gladman and William Whitney
Rhode Island	Vincent Graziano
Tennessee	Clinton Berry, III
Wisconsin	Paul Newman

Programs selected represented a variety of approaches taken to implement the Bank at the state-level. Each Program Manager explained his entire program and distributed samples of applications, certifications, etc. The in-depth presentations provided a forum for an exchange of information related to the various approaches of program operation. Several local participants also attended the workshop. The workshop was designed to increase awareness of the various approaches utilized in program implementation.

Program Compliance Reviews

Bank staff conducted a series of on-site program compliance reviews during Fiscal Year 1985. The primary objective of the reviews is to verify that state operating procedures on file with the Bank are being complied with. Recipient files are checked to verify that the documentation/certifications as required by the Rule are in place and that eligible recipients and measures/systems have been subsidized. The states visited in Fiscal Year 1985 are: Arizona, Arkansas, Colorado, Connecticut, Florida, Georgia, Idaho, Kentucky, Maine, Massachusetts, Michigan, New Hampshire, Ohio, Pennsylvania, Puerto Rico, South Carolina, Tennessee, Utah and Vermont.

The reviews also provided an opportunity for technical assistance and information-sharing by Bank staff through discussions on issues related to program operation. The reviews typically consist of a one-day, on-site visit to the state coordinating office along with other implementing agencies. Major findings from the on-site reviews are:

1. Funding an ineligible measure – item not specifically listed in Rule.
2. Inconsistencies in files regarding total costs and subsidy amounts.
3. Total costs of installed measures not defined.
4. Unclear how actual costs and subsidies provided were determined.
5. Lack of supporting records to show subsidized measures are cost-effective.
6. Income eligibility not based on family size.
7. Efficiency increase of replacement furnace not documented.
8. Income eligibility not based on 12-month projected basis.
9. Pre-1980 building age requirement not addressed.
10. Repayment of interest subsidies upon loan defaults not required.
11. Records retention by recipients for three years not addressed.
12. Administrative match needed for Bank funds obligated prior to 10/1/83.
13. Timing of drawdowns based on loan closing is not assured.
14. Delinquent installation certificates – not provided within 60 days of loan closing.
15. Lack of evidence of warranty from contractors/suppliers.
16. Lack of evidence for historic preservation/floodplain/wetland compliance.
17. Plans to conduct program audits undefined.
18. Grant matching resources certification requirement not addressed.
19. Contractor/supplier debarment requirement not addressed.
20. Nonprofit status for commercial/agricultural applicants not addressed.

States are required to undertake remedial actions to correct deficiencies found and report to the Bank upon completion.

Recapture and Reallocation of Funds

The Bank's regulations (24 CFR 1800) stipulate that a state participant has a limited time to use funds from the date of obligation by the Bank. All program participants enter into Cooperative Agreements which contain the time-frame by which a state must further obligate each fiscal year's allotment for energy conservation and solar energy measures in accordance with the state's program. This limitation is consistent with federal policy and encourages states to obligate and expend funds expeditiously.

All the unobligated or unexpended portion of the Bank's initial allocation of $30.4 million was subject to recapture by the end of September, 1984. Early in 1984, the Bank's Board of Directors approved an extension to March 1, 1985. The extension was granted to take into consideration start-up delays in program implementation typically encountered by states.

On January 3, 1985, the plaintiffs, *Dabney v. Reagan,* Civ. No. 82-2231 CSH (S.D.N.Y.) filed a motion for an order preventing the Bank from returning recaptured funds to the U.S. Treasury and compelling the Bank to expedite funds expenditure. On February 4, 1985, the Justice Department filed a declaration by Richard H. Francis

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explaining the funding process as well as the Department's legal interpretation contained in a memorandum of law. The recapture policy was justified as reasonable on these grounds:

a. Recapture provides an incentive for states to implement their programs and provide assistance in an expeditious and timely manner.
b. The recapture of funds is designed to protect the public by not permitting a state which fails to draw funds, to hold such funds "hostage," keeping them as a contingent liability or open "debt" of the U.S. Treasury.
c. The policy of recapture provides a mechanism whereby a state which is drawing funds for unauthorized purposes can be prevented from further actions contrary to program requirements.

On February 12, 1985, the plaintiffs filed a reply memorandum to the Department's Memorandum of Opposition of February 4, 1985, relating to the two primary issues:

1. Is recapture and return to the Treasury of already timely obligated Bank funds legal?
2. Did the government fail to provide FY 82-83 appropriated funds to qualified applicants in compliance with the statutory requirements as interpreted by this Court in 1982?

On February 27, 1985, the Department filed a supplemental Declaration by Richard H. Francis, rebutting certain declarations which accompanied the plaintiffs' reply memorandum. Judge Charles S. Haight of the U.S. District Court for the Southern District of New York issued a Temporary Restraining Order (TRO) for ten days prohibiting the Bank from acting to recapture funds and prohibiting states from expending or obligating any funds subject to recapture. The TRO expired on March 11, 1985. Judge Haight then issued a ten-day extension to allow for further consideration.

On March 20, 1985, Judge Haight affirmed the validity of Cooperative Agreement contract provisions that say the Bank can recapture funds obligated to a state if it does not expend the funds for eligible purposes within a designated time period, noting that such rules reflect sound administrative practices, but ordered that recaptured funds be redistributed in accordance with law.

In accordance with Court Order, on August 21, 1985, the Bank reobligated $5.4 million of recaptured funds along with the FY85 appropriation of $15 million. The recaptured funds represent balances from the Fiscal Year 82/83 uncommitted by certain state participants.

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Summary of State Semi-Annual Reports

A summary of statistical data representing program activity for the period July 1, 1984 through June 30, 1985 is provided using the data from state semi-annual reports. The data represent the activity of 44 of the current program participants. The other programs, including six which are relatively new to the Bank, have not disbursed Bank funds as of June 30, 1985. Activity for the 12-month period is shown along with cumulative program activity to date. The activity data shown in the Bank's FY 1984 report for the 12-month period ending June 30, 1984 plus the current 12-month activity data will not necessarily add to the cumulative data shown due to corrections made by some states to the earlier data after publication of last year's report. Program cost-effectiveness for energy conservation based on these data is reasonably valid, but the cost-effectiveness of the solar energy systems should be considered tentative due to very limited activity. A summary of the data is tabulated below.

Ratio of Total Cost of

	Ratio of Total Cost of Measures to Subsidy Amount Provided	Annual BTU Savings Per Dollar of Subsidy
	Average	Average
Conservation	3.03	74,500
Solar	2.30	9,486
Total	2.93	65,700

Using a representative $10 per million BTUs in delivered energy cost, the energy conservation measures subsidized have an overall simple payback of 4.1 years and solar energy systems have an overall payback of 24.2 years.

The reported annual energy savings from subsidies provided is 1628.9 billion BTUs. This is equivalent to approximately 280,845 barrels of oil annually. The total investment of federal, state, local and private funds per barrel of oil saved annually is $236 for conservation measures, $1,404 for solar energy systems and $259 overall. Assuming an average useful life of 20 years for these energy conservation and solar energy measures, the Bank is reducing the nation's dependence on foreign sources of energy at a total cost of $12.95 per barrel of oil saved compared to the current cost of imported oil of about $30 per barrel. The $12.95 total cost per barrel of oil saved includes a Solar Bank subsidy of $4.41 per barrel.

Program activity through September 30, 1985 is summarized on the Program Status Summary chart. Drawdowns by program participants through the electronic funds transfer system totaled $34.3 million. Of this total, $2.06 million or 6.0% was expended for administrative costs, $0.27 million or 0.8% for promotion, $18.1 million or 52.9% for loan subsidies on 22,659 projects, and $13.8 million or 40.3% for matching grants on 24,007 projects. The average loan subsidy was $800 and the average matching grant was $575.

Problems Encountered by States

As part of the semi-annual reporting requirements, states are asked to list problems encountered in managing the Bank program. The following highlights problems reported.

Financial Institutions:

- Lack of lending institution participation,
- Delays in loan closing for multi-family buildings and lender dropouts,
- Lack of participation by the larger financial institutions,
- The prohibition of penalties for early payment of loans in the Solar Bank Act has caused problems with the multi-family housing component. A number of these loans have been written for large sums of money. For non-assisted loans, banks generally require a prepayment penalty or charge additional points (which also undermines the program's impact). In response to this concern, the state implemented a prepayment of interest subsidy. However, reaction was negative because of the discount factor used in calculating the subsidy amount,
- Uncertainty on the part of the lender and the community as to the eligibility of measures for which an applicant is applying. This problem has been resolved by instituting a "pre-approval" of loans and awarding the subsidy to the lender prior to loan closing,
- High cost of administering small loans with a low rate of return,
- Lenders have also expressed dissatisfaction with the minimum period for which a loan can be issued (one year). Some felt that a six-month minimum would be more sensible in view of small loan amounts, and
- Lenders have also expressed uncertainty regarding the required truth-in-lending disclosures, i.e., what the effective interest rate is on the amount to be repaid after the subsidy is applied to the loan.

Allocation Process:

- Insufficient amount of funds to continue the program due to the timing of the allocation process, and
- No advance knowledge of the amount of the award.

Data Reporting and Record Keeping:

- Initial problems reported in this area are being alleviated by states switching to a computerized format which has increased the speed with which expenditures can be reviewed and approved, and
- Recipients were not timely in returning warranty and installation certificate.

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Cumulative Summary Data from State Semi-Annual Reports

By Income Level:	# of Applicants		# of Recipients		Energy Savings (Annual BTUs-Billions)	
	12 months	Cumulative	12 Months	Cumulative	12 Months	Cumulative
< 80% MAI*	44,763	58,231	23,231	29,720	930.0	1,164.2
80-100% MAI	3,767	4,376	3,116	3,516	153.1	172.2
100-120% MAI	2,815	3,214	2,381	2,604	117.0	127.1
120-150% MAI	3.721	4,698	2,775	3,313	166.0	191.2
over 150% MAI (where no income limit is imposed)	4,467	4,751	2,574	2,616	262.8	299.3
Total	59,533	75,265	34,186	41,769	1,628.9	1,954.1
By Building Type:						
1-4 Family	58,130	73,492	33,818	41,279	1,393.0	1,680.0
Multifamily	1,369	1,743	348	470	227.8	266.0
Agriculture/Commercial	34	34	20	20	8.1	8.1
Total	59,533	75-269	34,186	41,769	1,628.9	1,954.1

By Type of Measure:

Measure	Total Cost		Solar Bank Subsidies		Energy Savings (Annual BTUs-Billions)	
	12 Months	Cumulative	12 Months	Cumulative	12 Months	Cumulative
Conservation	$64,920,401	76,932,285	$21,420,664	25,909,052	1,596.9	1,921.4
Solar	$ 7,751,160	7,848,270	$3,373,302	3,422,269	32.0	32.7
Total	$72,671,561	84,780,555	$24,793,966	29,331,321	1,628.9	1,954.1

*MAI=Median Area Income
12 Month Data is for the Period 7/1/84 to 6/30/85; cumulative is to 6/30/85.

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Contractors:

- Since only Residential Conservation Service (RCS) listed contractors can be used for installing energy conservation measures with matching grant assistance, staff is frequently processing and reproducing the list because a large number of contractors are requesting immediate certification. This frequent list production has created a diminishing effect on list quality due to the unavailability of adequate resources to screen and train the contractor applicants, and
- Some states have reported a limited pool of RCS listed contractors.

Local Program Operators (LPOs):

- Some local operators continue to find field operations difficult because the Bank rule differs from established practices in other weatherization programs in which they are involved, and
- Slow progress and low funds expenditure by local participants. A number of states are reallocating funds among local participants to reduce the possibility of future recapture.
- The Indian Assistance Coordinator reported that the basic concept of a subsidized loan program has not been used much by the Indian community. In only one tribe that is actively pursuing assistance has there been willingness expressed to borrow money.

Audits:

- Often, delays were reported in waiting for an energy audit. One utility agreed to give the conservation bank audits a high priority which has reduced the time considerably,
- Another state reported a small and diminishing pool of audits, and
- One state waived the audit requirement if an applicant had applied for and not received one in eight weeks.

Not-for-Profits:

- The $5,000 subsidy cap does not appear to provide adequate incentive for nonprofits to participate in the program, and
- Many nonprofits operate out of religious buildings but in another wing. Some federal programs have allowed funding of measures which benefit only the space used for community programs.

Solar Direct-Hot-Water Heating (SDHW):

- Two territories encountered difficulty in getting a vendor to take the risk of ordering the solar products thereby tying-up capital. The length of time for a system to arrive is often more than 30 days, and
- In implementing the SDHW, the system approved for determining cost-effectiveness rejected every "real-life" system proposed. Also, no provision had been made for measuring all collector or system ratings against the same climatological standards. This particular state solved these problems on an interim basis by forming a committee consisting of engineers, program managers and representatives from the solar industry.

Recommendations

As part of the semi-annual reporting requirement, the following recommendations were received:

Allocation Process:

- Include obligations and applications process completions in the allocation formula,
- Remove the penalty in the formula for combining Bank funds with other federal low-income subsidies,
- Maintain current program funding levels, and
- Increase allocations for low-income programs.

Operations:

- Reduce upper income limit from 150% of the Median Area Income (MAI) to 120% and reduce the subsidy for those in the 100-120% of the MAI,
- Eliminate thermal doors, windows and air conditioners,
- Update MAI guidelines in coordination with other agencies,
- Extend time frame for use of funds,
- Allow a prepayment penalty on loans exceeding $50,000. The penalty clause could specifically state that the penalty is not applicable to the Solar Bank loan principal reduction amount,
- Allow Bank funding for religious buildings restricted to building areas which are used for purposes other than worship, and
- Develop a cost per barrel of oil equivalent.

Promotion:

- Obtain agreements from public and private utilities to distribute Solar Bank promotional material to audit recipients,
- Provide new programs with a model checklist to ensure the programs are in accord with federal regulations,
- Facilitate funds distribution by contracting with utilities that have an established conservation program, and
- Provide solar dealers and installers with an agency contact list.

The Solar Energy and Energy Conservation Advisory Committees plan to assess the problems and recommendations received from states for appropriate action in fiscal year 1986.

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Acceptance/Objections by Local Governments, Financial Institutions and the Public

All states reported a high level of interest as well as an increased awareness of the program. One state reported that the local solar industry had mixed emotions about the program because of the timing. They reported that since federal and state credits are lucrative, it seems more advantageous to claim tax credits. Perhaps when or if the tax credits are no longer available their program could be expanded to include solar applications.

Plans for Fiscal Year 1986

The following activities are planned for FY 1986:

- Monitoring program activity/progress on a state-by-state basis,
- Discussing the possible appointment/reappointment of new/continuing advisory committee members to those positions with terms expiring in FY 1986,
- Conducting Board meetings as appropriate,
- Obligating appropriated funds in accordance with the regulations and as directed by the Board,
- Conducting advisory committee meetings at least twice during the year and otherwise obtaining views of advisory committee members as needed,
- Monitoring Congressional activities and presenting testimony as appropriate,
- Conducting on-site program compliance reviews,
- Collecting and disseminating information to program participants through publication of *Solar Bank Notes,* and
- Analyzing recommendations and problems encountered from state reports for appropriate action.

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Solar Energy and Energy Conservation Bank Program
Synopsis of the 55 Participating Programs

State	Residential	Multi-family	Comm./ Agric.	Grants	Loan Sub.	Total Funding to Date
Alabama	s	s			x	$ 461,700
American Samoa	c,s			x	x	166,100
Arizona	c,s	s	s		x	522,200
Arkansas	c			x	x	1,918,500
California	c	c,s	c,s	x	x	4,453,000
Colorado	c	c		x		644,340.21
Connecticut	c,s	c		x	x	1,970,400
Delaware	c,s			x	x	242,200
District of Columbia	c	c		x	x	306,950.58
Florida	c,s	c,s	c,s	x	x	2,252,400
Georgia	c	c		x		1,063,787.41
Guam	c,s				x	166,500
Hawaii		s	c,s		x	171,500
Idaho	c			x	x	1,329,870.66
Illinois	c	c	c		x	3,395,300
Indian Tribes	c,s	c,s	c,s	x	x	241,300
Indiana	c,s	c	c	x	x	2,261,758.82
Iowa	c,s		c,s		x	2,163,500
Kansas	c	c			x	855,327.89
Kentucky	c,s	c,s	c,s	x	x	1,371,539
Louisiana	c			x	x	267,400
Maine	c,s	c,s		x	x	1,347,600
Maryland	c			x	x	356,340
Massachusetts	c,s	c	c	x	x	3,692,500
Michigan	c,s	c,s		x	x	2,938,700
Minnesota	c,s	c		x	x	2,893,800
Mississippi	c	c		x		377,900
Missouri	c,s	c			x	2.027,021
Montana	c				x	601,428
Nebraska	c,s	c		x	x	1,563,000
New Hampshire	c,s	c		x	x	801,138.07
New Jersey	c,s				x	1,507,746.02
New Mexico	c,s			x	x	717,024
New York	c,s	c		x	x	5,522,364
North Carolina	c,s	c,s	c,s	x	x	1,186,703
North Dakota	c			x		463,996.04
No. Mariana Is.	c,s	s	c,s		x	208,912
Ohio	c				x	3,650,858.19
Oklahoma	c	c		x		954,200
Oregon	c			x		1,791,900
Pennsylvania	c,s	c,s		x	x	4,780,800
Puerto Rico	s				x	1,005,600
Rhode Island	c,s	c	c	x	x	1,481,200
South Carolina	c	c		x		1,222,210
South Dakota	c			x		131,500
Tennessee	c,s	s		x	x	2,175,600
Texas	c			x		1,968,569
Utah	c,s	c,s	c,s	x	x	717,000
Vermont	c	c		x	x	369,591.15
Virginia	c,s	c			x	2,221,179.42
Virgin Islands	c,s	c,s	c,s		x	120,000.
Washington	s				x	1,401,189.40
West Virginia	c			x		200,900
Wisconsin	c			x		3,659,300
Wyoming	c			x		120,000
Totals	51c,31s	29c,15s	14c,11s	39	43	$80,415,643.86

c=conservation, s=solar, x=applicable

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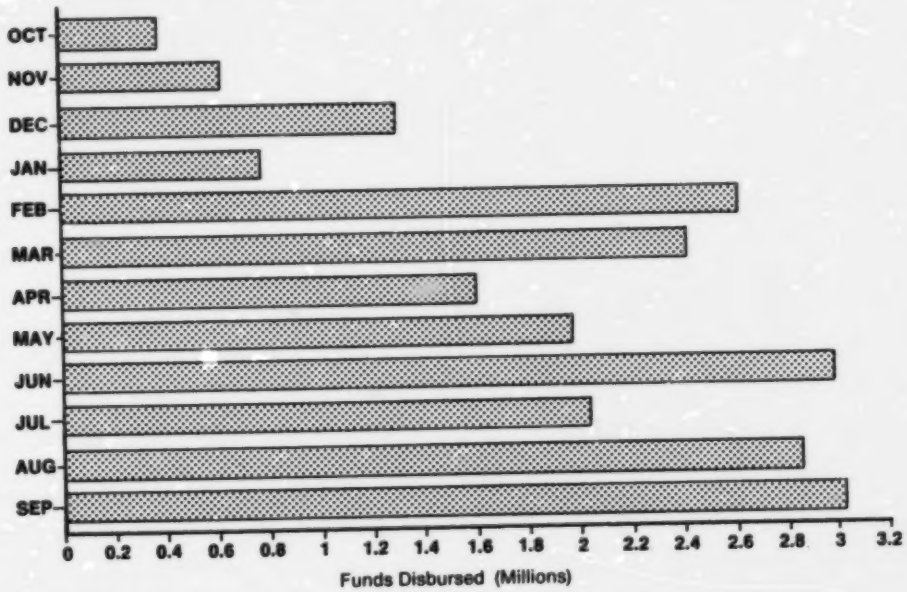
Monthly Funding Activity

Fiscal Year 1985

(for solar and conservation projects)

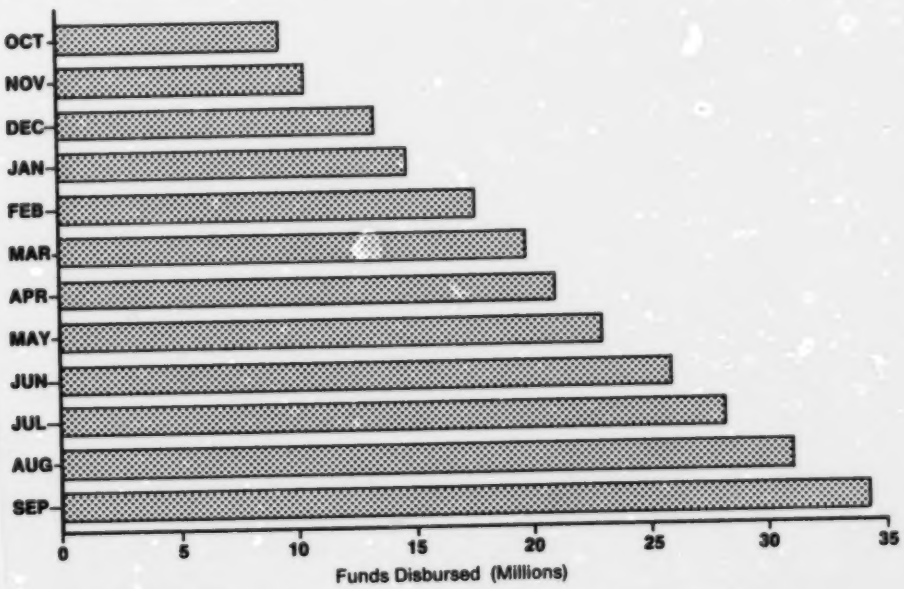


Source: Solar Bank Data Base

Cumulative Funding Activity

Fiscal Year 1985

(for solar and conservation projects)



Source: Solar Bank Data Base

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Solar Energy and Energy Conservation Bank
Program Status Summary
September 30, 1985

Funding Categories	Funds Obligated			Funds Expended		
	Dollars (000)	Planned Use (%)	No. of Projects	Dollars (000)	% of Funds Expended	% of Obligated Funds
Administrative and Promotional	7,131	8.97	---	2,331	6.80	32.69
Program	72,374	91.03	46,666	31,936	93.20	44.13
Loan Subsidies	44,543	61.55	22,659	18,135	56.79	40.71
Grants	27,831	38.45	24,007	13,801	43.21	49.59
<80% Median Area Income	40,788	56.36	33,492	21,085	66.02	51.69
80% - 150% Area Income	16,925	23.39	10,390	5,913	18.51	34.94
No Income Limitation	14,660	20.26	2,784	4,938	15.46	33.68
1-4 Family Conservation	48,950	67.63	43,111	25,851	80.95	52.81
1-4 Family Solar	9,607	13.27	2,489	3,657	11.45	38.06
Multifamily Conservation	10,685	14.76	1,042	2,235	7.00	20.91
Multifamily Solar	909	1.26	4	89	0.28	9.83
Commercial/Agricultural Conservation	1,544	2.13	11	31	0.10	2.02
Commercial/Agricultural Solar	678	0.94	9	73	0.23	10.74
Total	79,504	100.00	46,666	34,267	100.00	43.10

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Energy Conservation Advisory Committee Members

Representing	
Builders	Thomas V. Pritchard WestWind Mortgage Corporation San Diego, California
Consumers	Lillian Warren-Lazenberry, Chairperson Minneapolis, Minnesota
Producers/Installers of Energy Conserving Improvements	Pasquale Alibrandi Interstate Electrical Services Burlington, Massachusetts
Financial Institutions	Phyllis J. Campbell Old National Bank Spokane, Washington
Architectural or Engineering Interests	James Hughes MCC Powers Falmouth, Maine

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Solar Energy Advisory Committee Members

Representing	
Builders	Reed Robbins Investment Property Brokerage Stockton, California
Consumers	Ray H. Daley Metromail Corporation Los Angeles, California
Producers/Installers of Energy Conserving Improvements	Walter Bruce, Chairperson Walter Bruce Associates Santa Fe, New Mexico
Financial Institutions	Faye Agoes Sun Bank, N.A. Orlando, Florida
Architectural or Engineering Interests	Frank D. Rich, Jr. F.D. Rich Company Stamford, Connecticut

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Bank Staff

U.S. Department of Housing and Urban Development

Samuel R. Pierce, Jr., Secretary

Solar Energy and Energy Conservation Bank Staff:

Richard H. Francis, President-Designate

Walter R. Preysnar, Program Director

Colet L. Ritter, Special Assistant

SuzAnne B. Valenzuela, Confidential Assistant

Julia P. Fermoile, Staff Assistant

Cathelia Maner, Secretary

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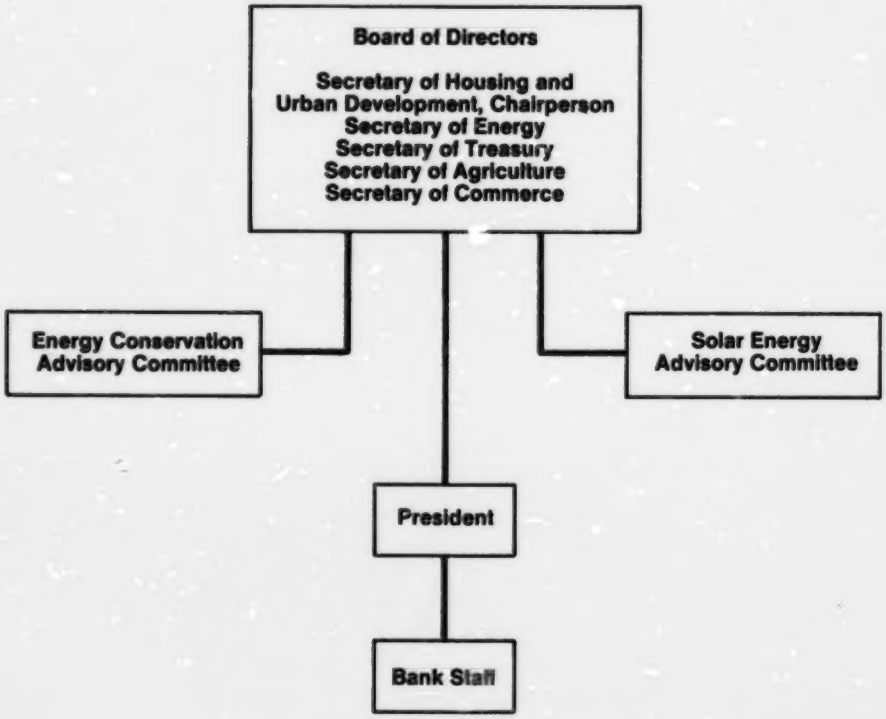
Solar Energy and Energy Conservation Bank

Organization Chart



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